UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,143	03/31/2004	Angel Stoyanov	WEYE121925/25324	8224

28624 7590 06/13/2008

WEYERHAEUSER COMPANY
INTELLECTUAL PROPERTY DEPT., CH 1J27
P.O. BOX 9777
FEDERAL WAY, WA 98063

EXAMINER	
CORDRAY, DENNIS R	
ART UNIT	PAPER NUMBER
1791	

NOTIFICATION DATE	DELIVERY MODE
06/13/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@weyerhaeuser.com

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/17/2008 has been entered.

Oath/Declaration

The oath or declaration submitted 3/31/2004 is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02. The oath or declaration is defective because:

> It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

The originally submitted Oath recites the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56(a), rather than 37 CFR 1.56.

Response to Arguments

Applicant's amendments filed 3/17/2008 have overcome the rejections under 35 U.S.C. 112, 2nd par. Accordingly, the rejections have been withdrawn.

Applicant's arguments, see pp 5-6, with respect to the rejection of Claims 1, 3 and 10-13 under 35 U.S.C. 102(b) or under 35 U.S.C. 103(a) over Herron et al are persuasive. The rejection has been withdrawn.

Applicant's arguments on pp 6-9 regarding Hassi et al (5637193), which was discussed in the recent interview on 3/11/2008 are noted. As Hassi et al is not used in the current rejections, the arguments are moot.

Applicant's arguments on p 9 with respect to the rejection of Claims 1 and 3-13 under 35 U.S.C. 103(a) over Cook et al in view of Herron et al are have been fully considered but they are not persuasive.

Applicant argues that there is no teaching, suggestion or motivation in either of the references to make the claimed invention, fibers having the claimed Whiteness Index (WI).

"[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently [or obviously] present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

Motivation has been set forth in the rejections for combining Cook et al and Herron et al to provide the claimed process as well as fibers having the claimed structure, polyacrylic acid crosslinked cellulosic fibers subsequently treated with the

claimed bleaching agents. The WI is a property of the fiber resulting from the structure. Absent convincing evidence of unobvious properties, the fibers made obvious over Cook et al in view of Herron et al have the same structure or composition and, therefore, the claimed WI properties because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent. The evidence presented in the instant Specification is not convincing because it is not commensurate with the scope of the claims. Some combinations of the claimed bleaching agents result in a decrease in the WI between 1 and 14 days after treatment. Also, there is no comparison with crosslinked or uncrosslinked fibers bleached by any other process or by any other bleaching agents, or with fibers crosslinked with any other crosslinking agents and bleached or unbleached.

In addition a new grounds of rejection are made over Herron et al in view of Dean et al, as detailed below.

Claim Rejections - 35 USC § 102 and § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4 and 10-13 are rejected under 35 U.S.C. 103(a) as unpatentable over Herron et al (5549791) in view of Dean et al (4822453).

Herron et al discloses individualized polyacrylic acid crosslinked cellulosic fibers and absorbent structures comprising the fibers (Abs; col 4, lines 24-37; col 5, lines 8-67; cols 24-26, Examples VI-IX). Herron et al teaches that polymeric polyacrylic acid is a preferred crosslinking agent because it is stable at higher temperatures and the crosslinked fibers are brighter than those crosslinked with alpha hydroxyl acids. In addition, absorbent structures made from fibers crosslinked by polymeric polyacrylic acid have increased wet and dry resilience (col 3, lines 50-62).

Herron et al discloses that absorbent products made using the fibers include paper towels, diapers, sanitary napkins, catemenials, etc (col 5, lines 37-42).

Herron et al also discloses that post crosslinking bleaching steps are known (col 13, lines 14-16).

Herron et al does not disclose bleaching the fibers after crosslinking, but does disclose post crosslinking bleaching as a recognized treatment for polyacrylic acid crosslinked fibers.

Dean et al discloses that a combination of pre-crosslink and post-crosslink bleaching results in higher fluid retention values as well as other processing advantages (col 17, line 32 to col 18, line 2, especially col 17, lines 51-53). Dean et al also discloses that the necessary amount of pre-crosslink and post-crosslink bleaching would be evident to one of ordinary skill in the art (col 17, lines 46-50). Dean et al discloses that post-crosslink bleaching stages are preferably alkaline treatments. Bleaching sequences comprising peroxide have been found to provide desirable results (col 17, lines 51-58). Sodium hydroxide is a known agent for providing alkalinity (col 17,

lines 3-4).

The art of Herron et al, Dean et al and the instant invention is analogous as pertaining to the crosslinking and bleaching cellulosic fibers. Dean et al and Herron et al are commonly assigned, share at least one inventor and relate to similar subject matter. It would have been obvious to one of ordinary skill in the art at the time of the invention to use pre-crosslink and post-crosslink bleaching in the process and product of Herron et al in view of Dean et al to obtain the fluid retention values and other processing advantages taught by Dean et al. The claimed bleaching agents would have been obvious as disclosed by Dean et al.

Absent convincing evidence of unobvious properties, the fibers made obvious over Herron et al in view of Dean et al have the claimed structure and, therefore, the claimed WI properties because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

Claims 1 and 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al (5562740) in view of Herron et al (5549791).

Cook et al discloses individualized polycarboxylic acid crosslinked fibers that have been after bleached with an aqueous solution of sodium hydroxide and hydrogen

peroxide (col 3, lines 42-45; col 13, lines 65-67). Cook further discloses an amount of sodium hydroxide to be applied of about 0.07 weight % to about 1.8 weight % of the dry fibers (1.4 to 36 lb/ton) and an amount of hydrogen peroxide to be applied of about 0.02 weight % to about 1.5 weight % of the dry fibers (0.4 to 30 lb/ton) (col 4, lines 42-45 and 49-51). The disclosed ranges of Cook et al for sodium hydroxide and hydrogen peroxide concentrations substantially overlap the claimed ranges. Cook et al discloses that the polycarboxylic acid crosslinked fibers can be treated by spraying sodium hydroxide and hydrogen peroxide onto an air stream containing the fibers (col 14, lines 18-20). Alternatively, multistage bleaching and washing steps following crosslinking are embodied (col 14, lines 27-30).

Cook et al discloses that the fibers are useful in absorbent structures, such as paper towels and absorbent pads for diapers, sanitary napkins and catemenials (Abs; col 5, line 66 to col 6, line 1).

Cook et al does not disclose crosslinking with a polyacrylic acid.

The disclosure of Herron et al is detailed in the above rejection of Claims 1, 3, 4 and 10-13.

The art of Cook et al, Herron et al and the instant invention is analogous as pertaining to bleached crosslinked fibers and absorbent products made therefrom. It would have been obvious to one of ordinary skill in the art to use a polymeric polyacrylic acid crosslinking agent in the fibers of Cook et al in view of Herron et al to take advantage of the higher temperature stability and to provide brighter fibers and increased wet and dry resilience in absorbent structures made therefrom.

The crosslinking agent, bleaching agent(s) and all of the claimed method steps have been disclosed by or made obvious over Cook et al in view of Herron et al. The resulting composition or structure, bleached polyacrylic acid crosslinked fibers, is also disclosed or made obvious and appears to be substantially identical to the claimed structure; therefore, it would have been obvious to one of ordinary skill in the art to obtain the claimed WI properties for reasons previously given.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS CORDRAY whose telephone number is (571)272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis Cordray/
Examiner, Art Unit 1791

/Eric Hug/
Primary Examiner, Art Unit 1791

Application Number
10/815,143

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

EXAMINER'S CASE ACTION WORKSHEET

Copy (Ctrl+C)	Palm Transaction Code 1322 81079179110815143	Legal Instrument Examiner

CHECK TYPE OF ACTION DATE OF COUNT

☒ Non-Final Rejection	☐ Restriction/Election Only	☐ Final Rejection
☐ Ex Parte Quayle	☐ Allowance	☐ Advisory Action
☐ Examiner's Answer	☐ Reply Brief Noted	☐ Non-Entry of Reply Brief
☐ Defective Notice of Appeal	☐ Interference Disposal SPE ____ (Approval for Disposal)	☐ Suspension (Examiner-Initiated) SPE _____ (*initial*)
☐ Defective Appeal Brief	☐ SIR Disposal (use only after FAOM)	☐ Supplemental Examiner's Amendment
☐ Miscellaneous Office Letter (With Shortened Statutory Period Set)	☐ Notice of Non-Responsive Amendment (With One Month Time Period set)	☐ Miscellaneous Office Letter (No Response Period Set)
☐ Abandonment after BPAI Decision	☐ Supplemental Action	☐ Response to Rule 312 Amendment
☐ Letter Restarting Period for Response (e.g., Missing References)	☐ Interview Summary	☐ Authorization to Change Previous Office Action SPE: _____ (*Initial*)
☐ Abandonment	☐ Express Abandonment Date: _____	☐ Other

Examiner's Name: DENNIS CORDRAY **AU:** 1791